Military Posture

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The Navy's XO has a philosophy for the next century. You can be small if you carry a very big stick.

Becoming a more lethal weapon

By George C. Wilson Times contributing editor

Tomorrow's Navy will slowly shrink from today's 390,000 officers and sailors to 370,000 by the turn of the century. It will remain at that level for almost a decade, when automation will facilitate another big manpower cut.

Yet, despite its smaller size, the 21st century Navy will be more lethal and accurate than ever before — so much so, officials hope, that the Marines can leave their artillery home when they fight in the littorals. They can count instead on an array of firepower mounted on ships offshore.

This is part of the design of tomorrow's Navy as described by one of its chief architects, Adm. Donald L. Pilling, vice chief of naval operations, in an interview with Navy Times. He was chief architect (1986-88) of the Navy's five-year budget plan, director of programming (1993-95), and head of requirements and assessments (1996-97) before becoming vice chief Oct. 31.

One of his biggest challenges as vice chief will be to transform the grand design into steel ships, accurate weapons, highly trained men and women and new strategy and tactics for using all of the above.

The coming transformation of the Navy will not proceed uncontested, however. The hardware the Navy plans to buy for the 21st century already has been attacked by critics, including the National Defense Panel, a group of outside experts commissioned by Congress to look at the Pentagon strategy of 2020. Pilling noted that some, like the members of the Defense Panel, contend the Navy is changing too slowly. Others, including some Navy officers and mem-

bers of Congress, complain the Navy is changing too fast.

As the executive officer for the chief of naval operations, Adm. Jay Johnson, one of Pilling's main jobs will be to justify the Navy's grand design to such critics while restructuring the fleet with a flat or reduced budget. He brings to the job the cool logic of the mathematician he is, along with the credibility of a seagoing sailor with lots of destroyer experience.

Pilling rebutted the criticisms of the National Defense Panel with the same logic lawmakers will hear next year when they assess the Navy budget.

"The panel disagrees with the decision to terminate the Arsenal Ship test bed," stated the panel in its December report. "The panel also believes that the Navy should look closely at accelerating the transformation to the CVX class of [aircraft] carriers in lieu of procuring additional Nimitz-class CVNs, and converting one or more of the four Trident" ballistic missile submarines to conventional weapons platforms.

The Arsenal Ship was championed by the late Adm. Mike Boorda when he was chief of naval operations. He envisioned it as an armored barge loaded with guns and missiles. It would stand off global hot spots so its weaponry could influence in-shore battles on short notice.

Weighing the Arsenal Ship

Pilling said the Navy did not abandon the Arsenal Ship as much as opt for a ship that could do much of its job and also move quickly from one hot spot to another. This alternative is called the Land Attack Destroyer, or DD-21, with the DD signifying

destroyer and the 21 meaning 21st century.

The Navy has invited contractors to submit rough designs of the DD-21 as the first step toward designing and building about 35 of them. The arsenal-toting destroyer is supposed to cost no more than \$750 million and would be so automated that its crew would number only 95 instead of 250 to 350. It would carry at least 250 gun and missile tubes with varying ranges, so the ship could blow up a power grid 1,000 miles away or provide close-in gunfire support for Marines battling through a jungle.

"The Arsenal Ship was an idea that, maybe if we had five or six of these, we could station them semi-permanently overseas," Pilling said. They would provide "always-on-station, on-call firepower."

But the picture changed. "As we looked at the next class of surface combatants, we realized that the capability you would have inherent in an Arsenal Ship you can have in land-attack destroyers" — for less cost and with more mobility. Two destroyers with 250 tubes each for shells and missiles would have the same firepower as one Arsenal Ship with 500 tubes and would be much more versatile, Pilling contended.

"We did this analysis of alternatives" to the Arsenal Ship "and it said, 'Arsenal Ships make sense, but a land-attack destroyer makes sense first.' We think we need 30 to 35 of those." The first one would be delivered to the Navy in 2004.

The Arsenal Ship came out "second or third" in the analyses of what ships the Navy should buy next for attacking land targets in the 21st century, Pilling said.

"Today, if you went out there, we have a 13-mile gun and we have a 1,000-mile cruise missile and nothing in between," he said. "We are going to back-fit some of our ships and forward-fit the new class of ships with extended-range guided munitions — 60-mile-plus munitions. We're looking at vertical guns, which have 100-mile-plus capability."

Once those guns and missiles are mounted on Navy ships, Pilling said, they can assume the job performed by artillery that Marine and Army troops bring along when they deploy to hot zones near the coast.

"The Marines, in their expeditionary mission, don't have to be lugging all their howitzers and all that ashore, because they know we have the capabilities to support them from the sea," he said. "And that solves a lot of logistical and mobility problems for them. We would be the fire support element for expeditionary warfare in the littorals."

Marines may beg to differ, but Pilling insists the Navy will be there to support them when asked. Would it be a stretch to conclude that the Navy's objective is to become the artillery for the battlefield commander in the 21st century? Pilling replied with enthusiasm: "That's exactly where we're going in our surface fire-support program."

Top leaders like Pilling are confident the Navy could be the artillery for littoral warfare in the 21st century. But, as former Defense Secretary William J. Perry found out when he met resistance within the armed services to the adoption of smart weapons, theater and field commanders must be convinced the breakthrough is real.

"It's a different way of thinking," Pilling said. "If you can precisely target from extended ranges, if you have knowledge of the guy's infrastructure, then you can bring him to his knees, from an infrastructure perspective, fairly quickly—if the national will is there to actually carry these things out." Firing at such communications centers and airports would be like pushing a finger into pressure points on the human body to stop the blood from circulating. Figuring out which of the enemy's pressure points are most vital is now called "nodal analysis," Pilling said.

During the Cold War, the Navy focused on being able to sink Soviet ships and deliver nuclear bombs on Soviet territory in an allout war. Another mission was controlling the seas so the Navy could help win a war indirectly by choking off an enemy's supply lines. Now the focus has shifted to helping

win inland battles.

"For the first time, not only are we capable of indirectly influencing events ashore," Pilling said, "we can do it directly and decisively."

Saving money to save ships

The smart guns and missiles on the highly automated DD-21 would be used against these nodes in a war. If the Navy's high hopes for the DD-21 are realized, its small crew and lower cost — \$150 million cheaper than the \$900 million Arleigh Burke-class guided-missile destroyers — would help in the financial struggle to keep the fleet at 300 or more ships in the 21st century. The savings would also allow the Navy to double purchases of combat aircraft to 150 a year.

"The solution is to reduce the number of people on ships, because they're very expensive," Pilling said. For example, an aircraft carrier has about 300 people whose jobs are to feed a crew of between 5,000 and 6,000 people, a ratio of about 20-to-1. "You probably wouldn't do that in the business world. Airliners have one person to serve 100."

As another economy, Pilling said the Navy plans to sign a longterm lease — perhaps 25 years, renewable every five years — with an operator who would build and man Navy cargo ships.

That would save manpower and up-front cash outlays, the naval equivalent of leasing rather than buying a \$40,000 car.

His anticipation that dozens of automated combatants and privately run support ships will be at sea by about 2010 are reasons Pilling predicts the Navy's next big manpower cut will not come until about 2009.

"If we can come in with a ship with a crew of 95 instead of 350, we're obviously going to go down to less than 370,000" active-duty sailors and officers, he said.

"If we can buy eight to 10 ships a year," Pilling said, "that will keep us above 300 ships. That's sort of where our red line is."

The Navy now has 347 combatant and support ships in its active-duty fleet.

"When we look out to see where we're going to be in the year 2015, if we can stay on track with our surface combatants, our carrier and submarine construction and do something like charter and build the logistics force, we think we're above 300 ships through the year 2015," he said.

Threatening that master plan, Pilling acknowledged, is the "big spike" of money that will be needed in one year to buy the last of the Nimitz-class carriers.

"We really think of it as the transformation carrier," Pilling said of CVN-77. "If you want CVX [a new carrier still in the concept stage] to be nuclear-powered, "we couldn't have it in 2008" because a new type of power plant has not yet been designed.

During a Pentagon workday, which he begins with a 5:30 a.m. workout at the Pentagon gym and ends at 7 to 7:30 p.m. when his aide hands him yet more papers to read at home, Pilling said he roams the Pentagon the same as a ship exec, and for the same reason. He does not want to isolate himself from problems brewing at lower levels. He also directs his staff to leave blanks on his schedule so he can think about what he and the Navy are doing.

The CNO's XO said he wants to make sure he does not make life miserable for some future CNO by failing to think through the implications of decisions being made today. Pilling also has another sense of mission implanted during his days at the Naval Academy.

"I can remember thinking as a midshipman, 'If I'm ever in position to do something about that, I'm going to do it.' Well, I have that opportunity in spades now. Some of the things I've been thinking about . . . hopefully, by the time I leave, I will have been able to make life better for the Navy."